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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/600,204	07/12/2000	DOUGLAS E. OLSON	MAN03P-110	7901

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EXAMINER

SHAPIRO, JEFFERY A

ART UNIT	PAPER NUMBER
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3653

DATE MAILED: 05/29/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,204

Applicant(s)

OLSON ET AL.

Examiner

Jeffrey A. Shapiro

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 26-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Claims 26-31 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely asserted traversal of the restriction (election) requirement in Paper No. 8. The Examiner notes that the claims of each group are directed towards divergent subject matter, as illustrated by their classification in separate subclasses, which would produce added burden on the Examiner.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in Application No. 09/600,204, filed on 8/9/00.

Claim Objections

3. Claim 18 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other dependent claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 19, 23 and 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in Claim 19, line 2 what a "pop-up" diverter is.

It is unclear in Claim 23, line 2, how the fingers are extendable "horizontally". It appears that the fingers, which appear to rotate with respect to the conveyor or spur surface, which means that if a finger extends, it is not necessarily in the horizontal direction. It appears that the fingers extend outward with respect to the fingers themselves.

It is unclear in Claim 25 what said "cart areas" are and how the gate being closed relates to allowing carts to be removed or loaded.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-8, 12-16 and 18-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Barry. Barry discloses the following.

As described in Claim 1;

1. a sortation conveyor having a main line defined by a conveying surface; (Note that the rail system may be construed as a sortation conveyor.)

2. a plurality of spurs extending from said mail line (see figure 1);
3. a diverter mechanism (36) at each of said spurs which selectively diverts containers from said conveying surface onto the associated one of said spurs;
4. at least one transport mechanism which transports containers from each of said spurs to a cart juxtaposed with that spur (see, for example, figures 22, 41 or 71);

As described in Claim 2;

5. said at least one transport mechanism is automatically operated and said carts are hand-operated (note that regardless of whether the carts are hand operated or not, the apparatus and system of Barry functions as described in Claim 2);

As described in Claim 3;

6. a diverter mechanism (36) which diverts containers from a feed line onto said conveying surface; (Note that a feed line may be construed to be one of the spur lines which feed another spur line.)

As described in Claim 4;

7. said at least one transport mechanism lowers containers from each of said spurs to a subjacent cart associated with that spur; (Note the lift apparatus' described in US 3,528,569 and US 3,677,194, both incorporated by reference in Barry at col. 6, lines 25-29.)

As described in Claim 5;

8. said at least one transport mechanism (note overhead device (G)) includes a plurality of stationary transport mechanisms, one associated with each of said spurs; (Note also that it would be expected that such transfer devices would be necessary where movement of containers from one spur to another would be required for efficient movement of cargo.)

As described in Claim 6;

9. said at least one transport mechanism travels between plural ones of said spurs; (Note that overhead device (G) is capable of transporting a spur and that transfer mechanism depicted in figure (22) is also capable of transport between spurs by said diverting mechanisms.)

As described in Claim 7;

10. said at least one transport mechanism (G) raises a subjacent cart associated with that spur to the level of that spur and moves containers directly from the spur to the cart; (Note again, that a cart is construed to be the flat car that containers are placed on.)

As described in Claim 8;

11. said transport mechanism includes an extendable support member and a vertical lift, said extendible support member adapted to retrieve containers from said at least one of said spurs (see the '369 patent, for example);

12. inserting containers to the associated cart;

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13. said vertical lift adapted to moving said support member between the vertical level of said one of said spurs and the vertical level of the associated cart;

As described in Claim 12;

18. said extendable support member is extended according to a controlled acceleration profile; (Note that the apparatus described in the '569 patent is capable of extending and contracting at a controlled acceleration profile, and would be expected to behave in such a fashion so as to exert maximum power to the container being lifted and to raise or lower said containers so as to not disturb the contents inside.)

As described in Claim 13.

19. said extendable member is extended by a variable frequency motor; (Note that it is considered to be inherent that raising and lowering would be accomplished by a motor, and that a variable frequency motor, such as an AC motor would be used. It is also noted that regardless of the type of motor, the apparatus of Barry still is construed to function as described in the claims.)

As described in Claim 14;

20. said vertical lift is servo controlled; (See argument described above regarding Claim 13.)

As described in Claim 15;

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21. a plurality of said transport mechanisms wherein each of said transport mechanisms is inhibited from operation when a cart serviced by that transport mechanism is being replaced; (Note that it is, at the very least, inherent that the transport mechanisms would be inhibited when carts are being changed or maintenance is being performed so that the transport mechanism does not damage a cart or cargo, or become damaged itself.)

As described in Claim 16;

22. other transport mechanisms are not inhibited from operation when one of said transport mechanisms is inhibited from operation; (It would be expected that other transport mechanisms would be operational so as to continue to maximize work throughput and efficiency.)

As described in Claim 19;

23. each of said diverters is a pop-up diverter; (Note that the rail diverter functions by extending outward from a particular rail or towards a particular rail, thereby diverting a load from one spur to another.

As described in Claim 20;

24. wherein said spurs are arranged on both sides of said conveying surface and wherein each of said diverters is bi-directional; (See figure 1 of Barry, noting that the diverters are considered to be bi-directional from the standpoint that they can divert between two different tracks.)

As described in Claim 21;

25. an alignment device (32a or 276A) positioned adjacent each of said carts, which aligns containers being inserted to the associated cart;

As described in Claim 22;

26. said alignment device is funnel shaped; (Note that the tips of alignment devices (32a or 276a are cone-shaped, which is construed to be funnel-shaped).

8. Claims 1-6, 8-21 and 23-25 are rejected under 35 U.S.C. 102(b) as being anticipated by Weir. Weir discloses the apparatus as follows.

As described in Claim 1;

1. a sortation conveyor (178) having a main line defined by a conveying surface;
2. a plurality of spurs (note 23, for example) extending from said mail line;
3. a diverter mechanism (128) at each of said spurs (note that a spur may also be construed as a position in the racks (177 or 176) which selectively diverts containers from said conveying surface onto the associated one of said spurs;
4. at least one transport mechanism (23, 24 and 25) which transports containers from each of said spurs to a cart (note that a truck trailer may be construed as a cart) juxtaposed with that spur;

As described in Claim 2;

5. said at least one transport mechanism is automatically operated
and said carts are hand-operated (see figure 12b);

As described in Claim 3;

6. a diverter mechanism (124, 125) which diverts containers from a
feed line onto said conveying surface;

As described in Claim 4;

7. said at least one transport mechanism lowers containers from each
of said spurs to a subjacent cart associated with that spur (note that the
diverter mechanism (124) lowers items to a level at which the containers
are diverted along (24) to a cart (s)—(see figure 2);

As described in Claim 5;

8. said at least one transport mechanism includes a plurality of
stationary transport mechanisms (note that there are several stacker
cranes (120), and several conveyors (24), each of which could be
construed to be stationary transport mechanisms, or capable of stationary
transport), one associated with each of said spurs;

As described in Claim 6;

9. said at least one transport mechanism travels between plural ones
of said spurs (note that cranes (120) are capable of moving between plural
spurs—see figure 19, for example);

As described in Claim 8;

11. said transport mechanism includes an extendable support member (25) and a vertical lift, said extendable support member adapted to retrieve containers from said at least one of said spurs;
12. inserting containers to the associated cart (S);
13. said vertical lift adapted to moving said support member between the vertical level of said one of said spurs and the vertical level of the associated cart;

As described in Claim 9;

14. said extendable support member (25) or (128) includes a plurality of fingers (63) or (140) which comb between portions of said at least one of said spurs below containers supported on that spur;

As described in Claims 10 and 17;

15. said spur includes a conveying surface made up of a plurality of roller members (note in figure 13, for example, that the chain belts are powered by rotating toothed gears that act as roller members);
16. said fingers comb between said roller members (see figure 13);

As described in Claim 11;

17. said vertical lift elevates said fingers upwardly in order to retrieve a container from said one of said spurs and elevates said fingers downwardly in order to insert a container to the associated cart (see figure 13);

As described in Claim 12;

18. said extendable support member is extended according to a controlled acceleration profile; (Note that it is, at the very least, inherent that one ordinarily skilled in the art would control the interaction with the cart or container by said support member so as to not disturb or damage the cart or container.)

As described in Claim 13.

19. said extendable member is extended by a variable frequency motor; (Note that it is considered to be inherent that raising and lowering would be accomplished by a motor, and that a variable frequency motor, such as an AC motor would be used. It is also noted that regardless of the type of motor, the apparatus of Weir still is construed to function as described in the claims.)

As described in Claim 14;

20. said vertical lift is servo controlled; (See argument described above regarding Claim 13.)

As described in Claim 15;

21. a plurality of said transport mechanisms wherein each of said transport mechanisms is inhibited from operation when a cart serviced by that transport mechanism is being replaced; (Note that it is, at the very least, inherent that the transport mechanisms would be inhibited when carts are being changed or maintenance is being performed so that the

transport mechanism does not damage a cart or cargo, or become damaged itself.)

As described in Claim 16;

22. other transport mechanisms are not inhibited from operation when one of said transport mechanisms is inhibited from operation; (It would be expected that other transport mechanisms would be operational so as to continue to maximize work throughput and efficiency.)

As described in Claim 19;

23. each of said diverters is a pop-up diverter (note that diverter (128) raises and lowers);

As described in Claim 20;

24. wherein said spurs are arranged on both sides of said conveying surface and wherein each of said diverters is bi-directional (see figure 13);

As described in Claim 21;

25. an alignment device positioned adjacent each of said carts, which aligns containers being inserted to the associated cart (note that it is construed that the forks or fingers (25, 63 or 70) are construed to be alignment devices which aligns containers next to each other—see also figures 7-9);

As described in Claim 23;

27. said fingers (25) are extendable horizontally in order to engage a container;

As described in Claim 24;

28. said extendable support member further includes a stripper member extendable horizontally independently of said fingers in order to slide containers off of said fingers; (Note that fingers (55) act as strippers with stationary fingers (63) so as to move horizontally and independently of each other—see col. 3, lines 60-72.)

As described in Claim 25;

29. including a plurality of cart areas each having an enclosure with a movable gate that can be selectively opened to allow other carts in other cart areas to be loaded while one cart is being removed; (Note that each truck (construed as a cart) has doors which may be closed, and that one of these trucks may be removed while one is being loaded.)

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Konig et al, Yoshie, Barry (US 3,939,775), (US 4,124,129) and (US 4,082,042), Fantuzzi, Kalika et al, Svyatsky et al, Ward et al and Isaacs et al (US 6,390,756 B1) are all cited as examples of container handling apparatus'.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is (703)308-3423. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (703)306-4173. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-2571 for regular communications and (703)308-2571 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.



Jeffrey A. Shapiro
Patent Examiner
Art Unit 3653



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May 27, 2002